

REMARKS

The Substitute Specification of the subject patent application has been reviewed. Several minor errors in numbering and phrasing have been corrected. It is believed that none of these changes or corrections constitute new matter. It has been noted that the reference numeral 37 has been used to denote both a blanket cylinder and a support ring. The reference number for the left outer support ring has been changed to 97 to correct that numbering error.

A proposed corrected Fig. 2 of the drawings, as filed, is also being submitted. It changes the reference number of the left outer support ring from 37 to 97 to agree with the changes made in the specification.

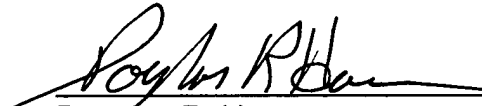
Claims 21-40 as presented in the Preliminary Amendment have been cancelled. New claims 41-56 are submitted in their place. It is believed that newly submitted claims 41-56 are similar in scope to cancelled claims 21-40 and are in a form more in accordance with U.S. practice.

Entry of this Second Preliminary Amendment prior to examination of the application on its merits is respectfully requested.

Respectfully submitted,

Hans-Bernhard BOLZA-SCHÜNEMANN
Applicant

JONES, TULLAR & COOPER, P.C.
Attorneys for Applicant



Douglas R. Hanscom
Reg. No. 26, 600

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JONES, TULLAR & COOPER, P.C.
P.O. Box 2266 Eads Station
Arlington, Virginia 22202
(703) 415-1500
Attorney Docket p1.1547PCT-US

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[0022] A further embodiment of cylinders with an intermediate support device - for example support rings - is represented in Fig. 2. A printing component 40 consists of two printing units 45, 50, i.e. in this case a first or right printing unit 45 and a second or left printing unit 50, as seen in Fig. 3. Each of the printing units 45, 50 has screen rollers 21 (= rollers of arbitrarily structured surface), ink transfer cylinders 22 and forme cylinders 23, each with an intermediate support device 24, for example an intermediate support ring 24, or 26, or 27. All of the cylinders 22, 23, or rollers 21, each have a barrel 55, which can have the same, or different barrel lengths "m". All the barrels 55 have an area 19 free from outer support rings. A barrel length m of the barrels 55 corresponds, for example, to a whole number multiple of the width of a newspaper page, plus an allowance. The screen roller 21 can have a diameter corresponding to a whole number multiple of the diameter of the forme cylinder 23, the same as the rubber blanket cylinder 37 [22], which cooperates with the forme cylinder 23. However, it (21) can also have the same or a lesser diameter than the forme cylinder 23.

[0023] All cylinders 22, 23, 37 and the roller 21 are seated in lateral frames 28, 29 and are driven by gears or individual drive mechanisms.

[0025] In the preferred embodiments, the intermediate support ring 24, 26, 27 is preferably made of one piece and consists of a - preferably endless - circular support ring element 31 with a left, 32, and a right cylinder-shaped shoulder 33. The shoulders 32, 33 have a width of several centimeters and have a lesser diameter than the support

ring element 31. They are used for centering and as receptacles for a left, 34, or right adjusting tube 36. The first ends of these are pushed onto the shoulder 33, or 32, respectively assigned to them, of the support device 24, and are connected with them in an interlocking and frictionally connected (press fit) manner. Respective end pieces 97 [37], or 38, are fastened to a second end of the adjusting tubes 34, 36. Each of the end pieces 97 [37], 38 has an adjusting pin 39, or 41, and furthermore respectively one support pin 42, or 43. The support pins 42, 43 are seated in the lateral frames 28, 29 and project out of them at least on one lateral frame side. The adjusting pins 39, 41 are introduced into the interior of the adjusting tubes 34, 36 and are each connected with them by means of, for example interlocking press connections. The end pieces 97 [37], 38 can be designed as highly accurate true-running races, or so-called endless or divided Schmitz rings (outer support rings).

[0026] For safety reasons, the end pieces 97 [37], 38 are each connected via several screw rod connections 44, 46, or 47, 48 with the lateral faces of the shoulders 32, 33.

[0027] The running surface (support surface) 25 [26] of the intermediate support device 24 of the screen roller 21 rolls off, for example by being pressed against it, on the running surface (support surface) 30 of the intermediate support device 26 of the ink transfer cylinder 22. The running surface (support surface) 30 of the intermediate support device 26 of the ink transfer cylinder 22 additionally rolls off on the running surface (support surface) 35 of the intermediate support device 27 [26] of the forme cylinder 23.

[0029] The ink transfer roller 22 can have, respectively following its two barrel ends 05, 10, a highly accurate left outer support ring 49 and a right outer support ring [race] 51.

[0031] The forme cylinder 23 can have, respectively following its two barrel ends 05, 10, a highly accurate left outer support ring 52 and a right outer support ring [race] 53.

[0032] The rubber blanket cylinder 37 can have, respectively following its two barrel ends 05, 10, a highly accurate left outer support ring 54 and a right outer support ring [race] 56.

[0033] The support rings 97 [37], 49, 52, 54 of the left side of the cylinder 21 [31], 22, 23, 37, on the one hand, and on the other hand their support rings 39 [29], 51, 53, 56 on the right side of the cylinders are each frictionally connected in series.